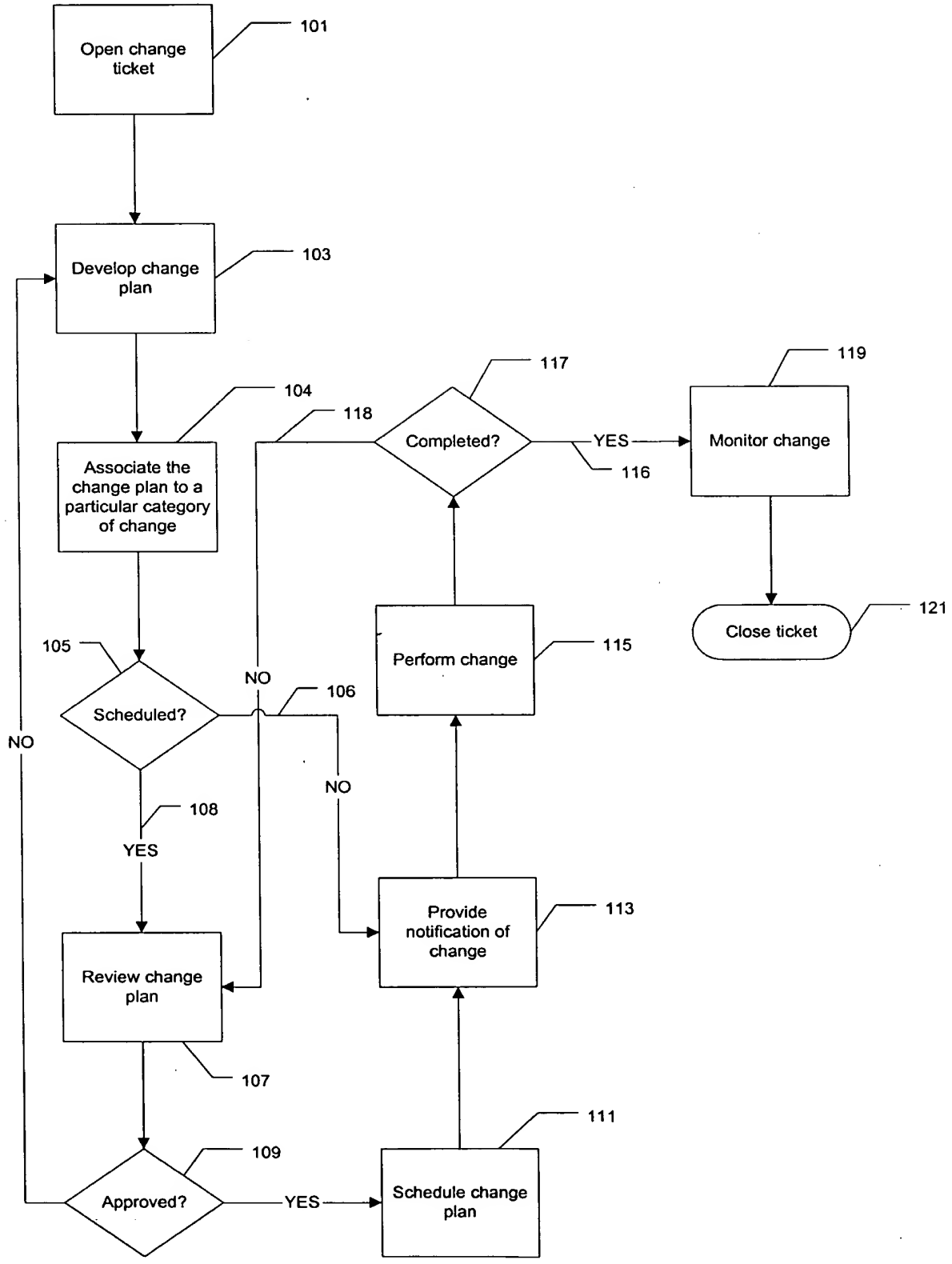
# FIGURE 1


Open change ticket
101
Develop change plan
103
Associate the change plan to a particular category of change
104
Scheduled?
105
NO
106
YES
108
Review change plan
107
Approved?
109
YES
Schedule change plan
111
Provide notification of change
113
Perform change
115
Completed?
117
118
YES
116
Monitor change
119
Close ticket
121
NO
NO

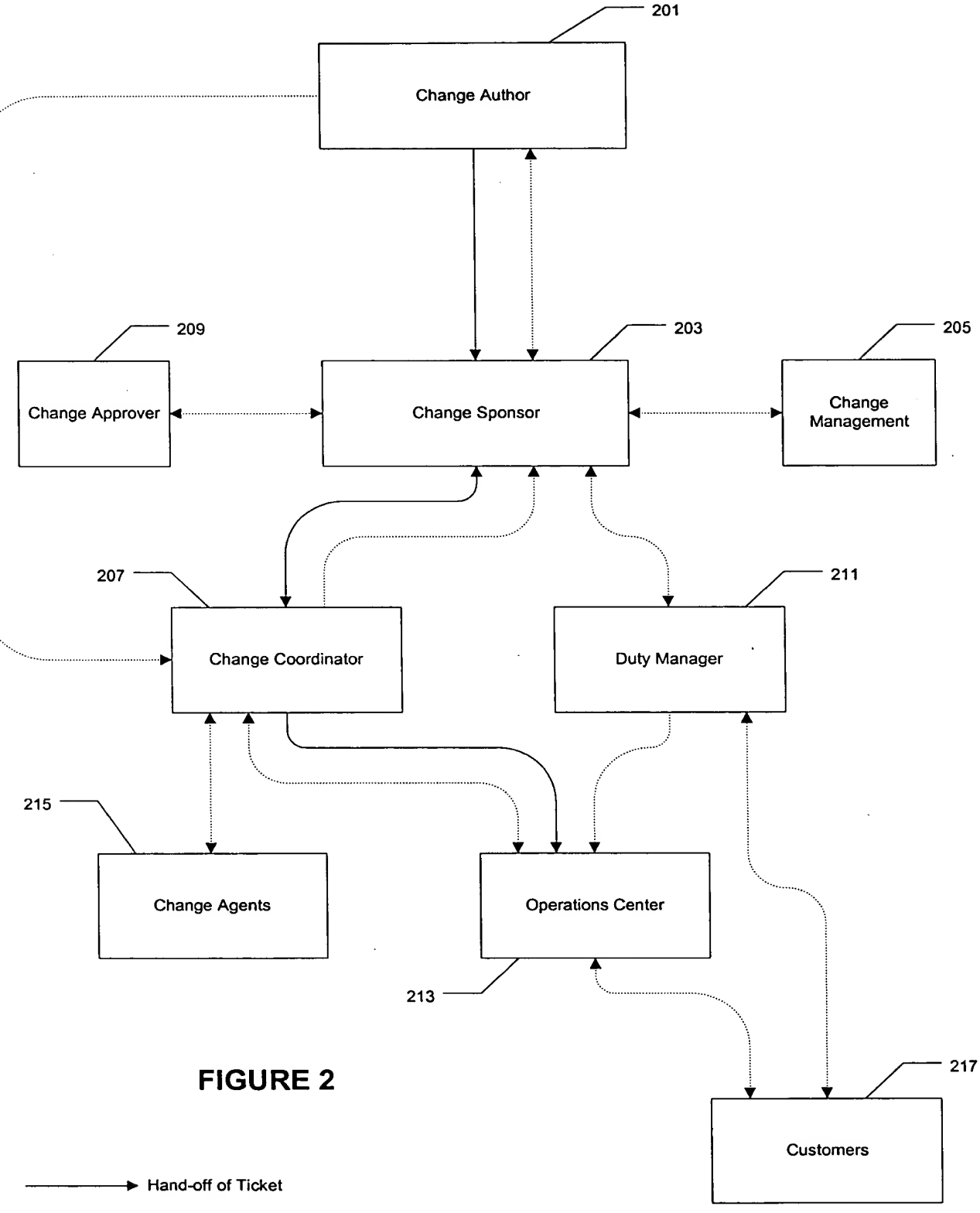

201
Change Author
209
Change Approver
203
Change Sponsor
205
Change Management
207
Change Coordinator
211
Duty Manager
215
Change Agents
Operations Center
213
217
Customers
Hand-off of Ticket
Communication

FIGURE 2

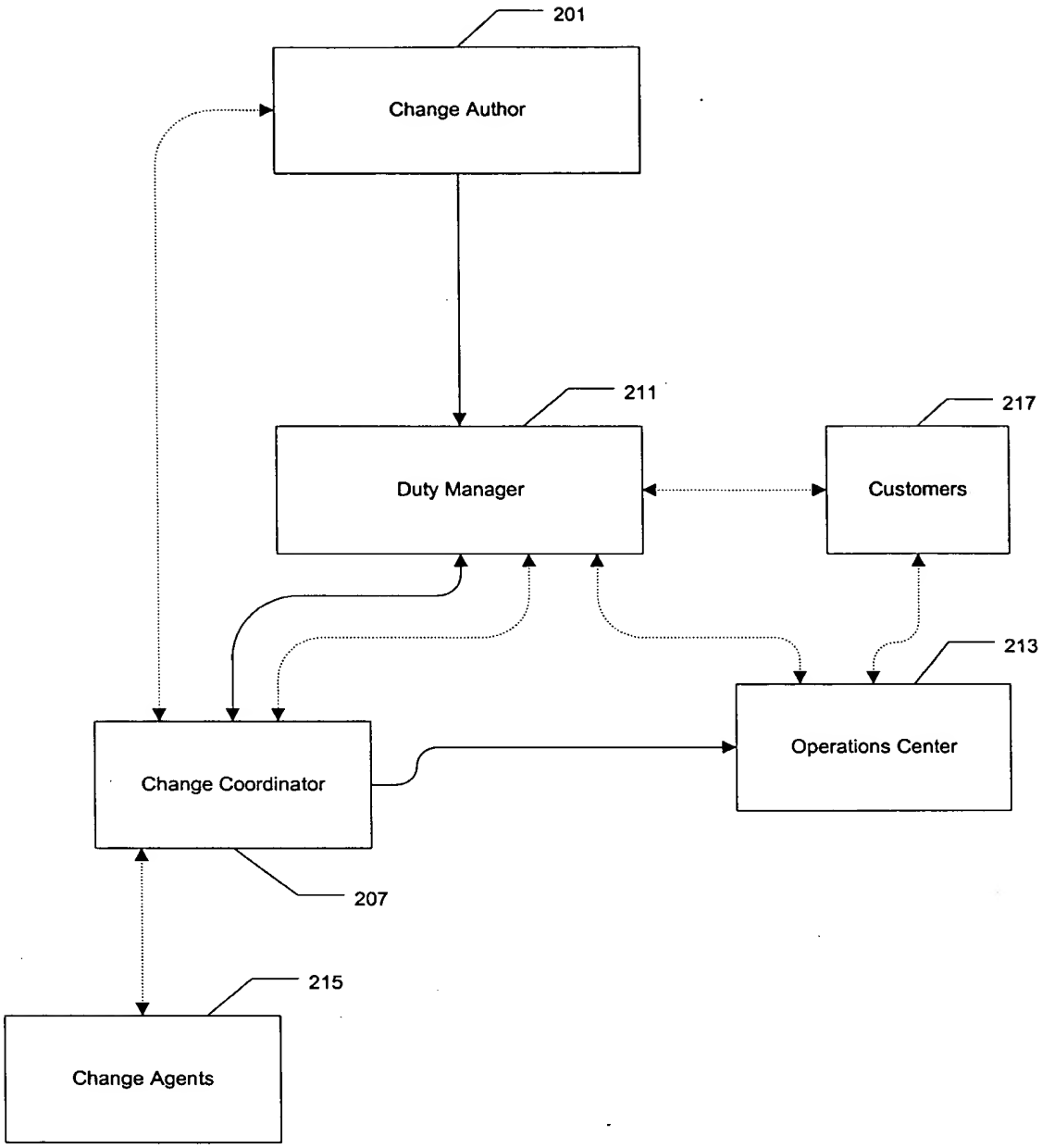



**FIGURE 3**

Hand-off of Ticket

Communication

**FIGURE 4**

X-Sender: koneill@po2.bbn.com
X-Mailer: Windows Eudora Pro Version 3.0.1 (32) Date: Wed, 29 Oct 1997 13:08:23-0500
To: change-approve@bbnplanet.com
From: Karen O'Neillkoneill@bbn.com
Subject: CMR: S1, Fridge cutover, 11/23/97, 12:15am-8:15am EST, #156483 Cc: dss@po2.bbn.com, jburke@po2.bbn.com, smorin@po2.bbn.com, lcamera@po2.bbn.com, jblieden@po2.bbn.com, hdstaff@po2.bbn.com, copr-sysadmin@po2.bbn.com, planet-geeks@bbnplanet.com

GTE Internetworking
Change Request Form
(Version 2.2.1)

401→ Change Sponsor: Karen O'Neill
403→ Change Author: John DeBella

405→ Change Coordinator: John DeBella
407→ Change Agents: John DeBella

409→ Change Request (Ticket) Number: 1456830
411→ Facility Name: Corporate I/T Data center Service Element: fridge.bbnplanet

413 → Start Date: 11/23/97
Start Time: 11/23/97 00:15 EST
End Time: 11/23/97 08:15 EST

415→ Impact Type (Down hard/outage, potential outage, degradation or none); Down hard/outage

417→ Impact Duration (per customer and/or service element): 8 hours

419→ Impact Statement: fridge.bbnplanet.com (aka. Freezer.bbnplanet.com and icebox.bbnplanet.com) will be unavailable. All services and home directories dependant on fridge.bbnplanet.com will be impacted. Servers and desktops which mount fridge will be impacted such as Pasilla, Poblano, Cayenne, Moho, Captain-Crunch, Fresno, etc.

421→ Change Category (E1, E2, S1, S2, S3, U1, U2,): S1← 422

423→ Risk (Low, Medium, High): High

425→ Priority (Must, Important, Nice): Important

427→ Summary of Change: Cutover NFS services from fridge.bbnplanet.com (a/k/a freezer.bbnplanet.com and icebox.bbnplanet.com) to SUN hardware solution. Reboots of pasilla, poblano, cayenne, moho, captain-crunch, nis, fresno will be required during this downtime. A schedule of re-boots will be available and communicated.

429→ Benefit Statement: Provide an NFS solution that is more expandable, more redundant and better supported.

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**FIGURE 5**

431→ Reason for Change: Provide an NFS solution that is more expandable, more redundant and better supported.

433→ Success criteria: The new hardware architecture (the Sun server and storage array) boots up as fridge.bbnplanet.com, freezer.bbnplanet.com, and its exported files systems are available and mountable by its clients.

435→ Contingency Planning: Fail back to original Fridge server (Network Appliance system).

437→ Notification:

internal: all-staff@bbnplanet.com, turnover@bbn.com, hdstaff@bbn.com external:

439→ Database and/or DNS change: None.

441→ Equipment: Fridge.bbnplanet.com (a/k/a freezer.bbnplanet.com, icebox.bbnplanet.com)

443→ Change Plan: A cutover plan will be made available and communicated appropriately.

Note- Upon change author's completion of this form, please send your respective change sponsor who will review and submit to "change-approve".

**FIGURE 6**
**Change Schedule**

601
↓

| Ticket # | Start Date | Start Time | End Time | Outrage Duration | Cal | iPriority | Brief Description | Internal/External Notification | Customer Impact (# of, etc.) | Change Coordinator (& # of Pager) | Routing (DNS) or Database Issues | Dependencies |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12345 | 12/31/96 | 0300 | 0700 | 15 minutes | S1 | Important | Load new version of Cisco Software into Cambridge 1-br1. | Ner_tech_customer -contact Ner_att_ tech_customer_contact | 700 | Clark | No | N/A |
| N/A | Ongoing | 0300 | 0700 | | S3 | Must | Nightly BGP Reset | | | Kennedy | No | N/A |

## FIGURE 7

### Change Categories Matrix

715 ↓ 718 ↓ 721 ↓ 723 ↓ 725 ↓ 727 ↓

| | Category | Description | Period For work | Notification of GNOC | Advance Customer Notification | Mgmt. Approval |
|---|---|---|---|---|---|---|
| 701 → | E1 Event Response | Work necessary to address a customer-impacting event. The change to correct the event has the potential to affect more customers or to extend duration more than presently affected by the event. | As required | Change coordinator contacts GNOC prior to beginning work. | As much as possible. | Expedited |
| 703 → | E2 Event Response | Work necessary to address a customer-impacting event. The change to correct the event will not affect more customers or extend duration more than is presently affected by the event. | As required. | Change coordinator contacts GNOC prior to beginning work. | As much as possible. | No |
| 705 → | S1 Scheduled | Work of high risk or that causes or is likely to cause a service outage or degradation lasting greater than 15 minutes.<br>Potential for:<br>Uncertain results<br>Non-localized impact<br>exceeds maintenance window<br>includes introduction of new procedures and/or elements. | Fri, Sat or Sunday 0000-0600 Local Time | Planned Ticket<br>Change coordinator contacts GNOC just prior to beginning work | 10 business days | Review Meeting |
| 707 → | S2 Scheduled | Work of medium risk or that causes or is likely to cause a localized service outage or degradation lasting between 10 and 15 minutes.<br>Reasonably predictable results.<br>Unlikely to:<br>Exceed maintenance window<br>Create wider than anticipated impact | Fri, Sat or Sunday 0000-0600 Local Time | Planned Ticket<br>Change coordinator contacts GNOC just prior to beginning work | 10 business days | Review Meeting |
| 709 → | S3 Scheduled | Work of low risk or that causes or is likely to cause a localized service outage or degradation lasting less than 10 minutes. Implementing previously tested solutions with no unanticipated results. | Fri, Sat or Sunday 0000-0600 Local Time | Planned Ticket<br>Change coordinator contacts GNOC just prior to beginning work | 6 business days | Expedited or Review Meeting |
| 711 → | U1 Unscheduled | Work that is commonplace yet not in formal procedures presenting low to no risk of service outage or degradation. (Example: InfraEng requesting routing change to a pre-production router). | Where possible 2100 to 0800 Local Time | Planned Ticket<br>Change coordinator contacts GNOC just prior to beginning work | N/A | No |
| 713 → | U2 Unscheduled | U2s are derived from a list of approved U2s (on iweb in Change Management area). Routine or scripted work, presenting low to no risk of service outage or degradation. Repetitive and/or completely automated work. (Example: Customer Provisioning work). | Ongoing | Trap to GNOC, if applicable, or other audit trail. | N/A | Expedited To add to, or change work in, this category |

**NOTE:** Local Time "Consideration" - When change activity impacts across multiple time zones, the work is done on Greenwich Time. Changes to the schedule (or scope of impact) for work that occurs on a recurring/published schedule (i.e., nightly BGP reset) require review and approval at the review/lock-down meeting. In the case of change activity that impacts only one customer, the time-frame of work, including advance notification, can be negotiated with the specific customer.